Between the ganglia habenulæ there is a commissure radiating into the lowest part of the posterior commissure. The portion of this commissure adjacent to the atrophied ganglion habenulæ also becomes atrophic.

It can be traced for some distance into the posterior commissure, and according to M., indicates the direction of the sphincter nucleus.

But no atrophy was found among the collections of cells belonging to the oculo-motorius nucleus.

On the other hand, atrophy of Gudden's nucleus could be demonstrated in two cases. The reflex path for the rays of light which reach the eye, and the subsequent contraction of the pupil would have the following course: Optic nerve (optic tract) to the ganglion habenulæ without decussation, thence to the posterior commissure to Gudden's nucleus, and from the latter to the fibres of the oculomotorius crest.

These researches indicate the method to be adopted in future in all anatomico-pathological investigations of this nature.

TRAUMATIC TABES.

In the "Zeitschrift f. klin. Medicin," Bd. xvii., hft. 1 u 2, Klemperer has tabulated the literature upon this subject. In all there were thirty cases, to which the author adds four new cases under Leyden's observation.

In a monograph entitled "The Gray Degeneration of the Posterior Columns of the Spinal Cord," published in 1863, Leyden was the first to describe in detail a case of traumatic tabes.

K.'s *first* patient was a locksmith, who was injured in the right leg from the fall of a heavy weight. The wound healed perfectly, yet, after a short time, the patient noticed that the right leg was weaker than the left, and that the scar became painful when he worked. Despite all treatment, the pain grew worse without previous exertion, and radiated over the entire leg. Towards the end of the same year, about eight months after the injury, the left leg became weak, and the pains, which were of a shooting character, affected both legs.

Not quite a year and a half after the injury, he was obliged to visit the clinic, and the diagnosis was made of well advanced tabes.

The *second* patient was injured during the late war by his wounded horse falling upon him. The right foot was crushed in the region of the ankle-joint, without fracture, but with extensive laceration of the soft parts.

The course of the disease was the same as in the last case, but not so rapid.

A *third* case originated as the result of a gunshot wound of the left leg. Painful spasm in the left calf muscles occurred after forcible exertion. Tabetic symptoms appeared slowly.

The *fourth* case had its starting point in a fracture of both clavicles, through his horse falling upon him.

All of these cases serve to confirm the view that tabes may arise as a result of peripheric injuries.

MUSCULAR ATROPHY AND CHANGES IN ELECTRICAL REACTION OCCURRING AS A RESULT OF CEREBRAL DISEASE.

Wasting of the muscles has been frequently observed in limbs paralyzed from brain disease, and in part accounted for by the existence in the cortex of trophic centres for the muscles. Considerable diminution in the electrical irritability has also been noted in several cases of cerebral hemiplegia and hemianæsthesia. However, in no case were qualitative changes present, either in the form of alteration in the galvanic formula, or slow contraction upon faradic or galvanic excitation.

Eisenlohr (Neurologisches Centralblatt, 1890, No. 1) reports a number of observations with autopsies bearing upon this point.

The *first case* was a female with aphasia, reported in the Deutsch. Med. Wochenschrift, 1889. In this instance there was atrophy of the small muscles of the right hand. There were also well-marked slow contractions in the abductor minimi digiti to cathodic closure and anodic closure. The autopsy revealed two abscesses about the size of a walnut in the left cerebral hemisphere. One was situated in the posterior part of the caudate nucleus, encroaching upon adjacent portions of the lenticular nucleus, corona radiata and internal capsule, and the other within the tegmentum of the crus in the subthalamic region and the posterior part of the optic thalamus. There was moderate secondary degeneration in the left pyramid and in the right lateral column of the cord. The anterior horns in the cervical and upper dorsal region were perfectly normal.

The *second case* occurred in a coppersmith twenty-one years of age, with epileptiform convulsions and weakness of the right hand, which ultimately advanced to paralysis of the extensors, paresis of the flexors and flaccidity of the muscles of the arm and forearm.